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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,195	01/11/2002	Kouichi Akabori	040679-1417	4872

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FOLEY AND LARDNER
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

NGUYEN, THU V

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 10/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/042,195

Applicant(s)

AKABORI ET AL.

Examiner

Thu Nguyen

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 3661

DETAILED ACTION

The amendment filed on July 23, 2003 has been entered. By this amendment, claims 1-7, 9-14 have been amended to overcome the 112 rejection, all claims 1-14 are now pending in the application.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al (U.S Patent No. 6,044,321) in view of Tamatsu et al (U.S Patent No. 6,317,073).

As per claim 1, 13-14, Nakamura teaches a cruise control system including an inter-vehicle detecting section, a vehicular velocity detection section, a target inter-vehicle setting section, a vehicular traveling speed controlling section (col.17, lines 13-67). Nakamura does not teach a delay providing section. However, Nakamura teaches delaying deceleration, acceleration when the distance is not within collision threshold (col.22, lines 44-67; col.32, lines 37-62), and Tamatsu teaches a delay providing section (col.17, lines 58-67; col.18, lines 1-3). It would have

Art Unit: 3661

been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the delay providing section of Tamatsu to the cruise control system of Nakamura in order to eliminate the noise from the signal.

As per claim 2-7, 9-10, 12, Nakamura teaches providing the dead time for the velocities of the vehicle (col.32, lines 37-43). Further, according to claim 3, 6-7, 9-10, adjusting the duration of the dead time to suit a particular application requires only routines skill in the art.

As per claim 8, Nakamura teaches determining the velocity of the preceding vehicle (col.20, lines 53-61; col.29, lines 41-47).

As per claim 11, Nakamura teaches determining the inter-vehicle distance (col.16, lines 58-67; col.17, lines 1-67).

Response to Arguments

3. Applicant's arguments filed on July 23, 2003 have been fully considered but they are not persuasive.

In response to applicant's argument on page 13, second to third paragraph, and page 14, second paragraph, Nakamura does teach the inter-vehicle distance detecting section and the vehicular velocity detecting section (col.17, lines 13-22); a target inter-vehicle distance setting

Art Unit: 3661

section (col.14, lines 5-7); a vehicular traveling speed controlling section (col.14, lines 31-40). Nakamura does not teach the delay providing section. However, Tamatsu teaches providing a delay to the detected velocity detected from the sensor (col.18, lines 1-15). Examiner admits that Tamatsu teaches including the delay to the measured speed detected from the speed sensor itself. However, independent claim 1 does not really distinguish the difference between the delay applied to the measured speed from the speed sensor of the present application with the delay in col.18, lines 1-3 of Tamatsu applied to the measured speed of the speed sensor in col.17, lines 54-58. The independent claim 1 only teaches a delay section that provides a delay for the velocity of the host vehicle or the target vehicle. The delay section disclosed in the independent claim 1 reads on the delay section (the filter) that provides delay (col.18, lines 1-3) to the velocity (col.17, lines 54-58) of Tamatsu. The scope of the delay section in claim 1 overlaps the scope of Tamatsu's teaching because the delay taught in claim 1 can be used for correcting the phase shift signal measured from the speed sensor itself as taught by Tamatsu.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 3661

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 305-7687, (for formal communications; please mark "EXPEDITED
PROCEDURE")

Or:

(703) 305-7687 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park V, 2451 Crystal
Drive, Arlington, VA., Seventh Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Nguyen whose telephone number is (703) 306-9130. The examiner can normally be reached on Monday-Thursday from 8:00 am to 6:00 pm ET.

Art Unit: 3661

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski, can be reached on (703) 308-3873. The fax phone number for this Group is (703)305-7687 .

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703)308-1113.

A handwritten signature in black ink, appearing to read "Thu Nguyen", with a horizontal line under the last name.

Thu Nguyen

September 22, 2003